

I claim:

1. A modular sleeve for interfacing modular enhancements to a firearm, said firearm having minimally a receiver with a stock and barrel attached thereto, said barrel defining the forward portion of the firearm and said stock defining the rearward portion of the firearm, said firearm longitudinal axis being defined as horizontal and running from said stock through said receiver to said barrel, said receiver having a forward portion, a top and a rearward portion, said barrel being joined to the forward portion of the receiver, said stock being joined to the rearward portion of the receiver, comprising:

a universal receiver sleeve having a top side, an underside and two opposite sides connecting said top side with said underside, said universal receiver sleeve being further defined as having a forward portion and a rear portion, the underside of the rear portion of the universal receiver sleeve being fixedly attached to the firearm receiver top, said receiver sleeve forward portion extended forward above the firearm barrel;

an upper handguard piece having a front, rear, top, open bottom, opposing sides, outer side surfaces and inner side surfaces, said top, sides and bottom

defining a hollow interior, said front and rear defining an upper handguard piece longitudinal axis, said upper handguard piece top being joined to the underside of the forward portion of the receiver sleeve;

a bottom handguard piece having a front, rear, open top, bottom, opposing sides, outer side surfaces and inner side surfaces, said bottom, sides and top defining a hollow interior, said front and rear defining a bottom handguard piece longitudinal axis, said bottom handguard piece being removably attached to the upper handguard piece;

wherein, said upper handguard piece and attached bottom handguard piece surround the firearm barrel without touching said barrel.

2. A modular sleeve as recited in claim 1, wherein:

each of the upper handguard side outer surfaces have two longitudinal channels formed therein, a large and shallow upper channel and a bottom interface channel, said bottom interface channel being positioned near to the upper hand guard piece bottom.

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3. A modular sleeve as recited in claim 2, wherein:

each of the bottom handguard side outer surfaces have two longitudinal channels formed therein, a small and shallow upper channel and a larger, shallow bottom channel.

4. A modular sleeve as recited in claim 3, wherein:

the bottom hand guard inner side surfaces each have a longitudinal protrusion positioned near to the top, each protrusion being a mirror of the other;

wherein the bottom handguard piece is adapted to being joined to the upper handguard piece by sliding the bottom handguard longitudinal protrusion into the upper handguard bottom interface channel.

5. A modular sleeve as recited in claim 4, further comprising:

a plurality of apertures formed in the upper handguard piece; and

a plurality of apertures formed in the lower handguard piece.

6. A modular sleeve as recited in claim 5, wherein:

said upper handguard interface channels and bottom handguard upper channel have corresponding cutout portions.

7. A modular sleeve as recited in claim 6, further comprising:

a plurality of spring-loaded connectors inserted through the bottom handguard piece sides near to the bottom handguard piece top, said connectors adapted to hold the top and bottom handguard pieces in a desired alignment.

8. A modular sleeve as recited in claim 7, wherein:

the top of the upper handguard piece and receiver sleeve forward portion are integrated into one piece, thereby forming a resulting upper handguard piece top, said resulting upper handguard piece top having an upper surface and an under surface.

9. A modular sleeve as recited in claim 8, further comprising:

a longitudinal gap in said resulting upper handguard piece top upper surface therein.

10. A modular sleeve as recited in claim 9, further comprising:

a hinging element fixed to the resulting upper handguard piece top upper surface at the upper handguard front;

an elongated interface element approximately equal to the said longitudinal gap, said elongated interface element adapted to pivotally join said hinging element.

11. A modular sleeve as recited in claim 10, further comprising:

a sleeve dovetail interface element adapted for engagement with the rear portion of the universal receiver sleeve rear portion, said sleeve dovetail interface element having an exterior horizontal surface with a unique cross-sectional dovetail

shape adapted to attach ancillary equipment, and an opposite interior surface with a standard dovetail configuration for securing the universal receiver sleeve rear portion the receiver top.

12. A modular sleeve as recited in claim 11, further comprising:

a plurality of notches formed in the receiver top, each said notch having a rectangular cross section and being formed transverse to the longitudinal axis of the firearm;

an elongated rectangular opening formed in a first universal receiver sleeve opposite side, said rectangular opening extending from a universal receiver sleeve opposite side lower surface a predetermined distance toward the universal receiver top side and terminating in a rectangular opening upper edge, said rectangular opening upper edge having a plurality of rectangular notches formed therein;

a plurality of apertures formed in a second universal receiver sleeve opposite side, each said aperture being formed directly opposite a first universal

received sleeve opposite side rectangular notch;

a plurality of projecting elements formed on the sleeve dovetail interface element interior surface, each said projecting element having a rectangular cross-section, said projecting elements adapted to engage the notches across the receiver top;

wherein, said sleeve dovetail interface element interior surface is adapted to engage said universal receiver sleeve opposite side elongated opening and the side of said receiver top;

wherein, said plurality of sleeve dovetail interface element interior surface projecting elements are adapted to engage said elongated rectangular opening rectangular notches, said receiver top notches and said plurality of apertures in said second received sleeve opposite side; and

a plurality of nuts each adapted to engage a portion of a sleeve dovetail interface element interior surface projecting element projecting through each said aperture.

13. A modular sleeve as recited in claim 12, wherein:

the resulting upper handguard piece top upper surface  
is be formed into a male weaver type interface.

14. A modular sleeve as recited in claim 13, wherein:

the bottom handguard piece bottom is formed into a male  
weaver type interface.

15. A modular sleeve as recited in claim 14, wherein:

each upper handguard outer surface bottom interface  
channel has a general female, T-shaped cross  
section;

each bottom hand guard inner side surfaces protrusion  
has a T-shaped cross section.

16. A modular sleeve as recited in claim 15, further  
comprising:

a plurality of the apertures in the upper handguard  
piece and lower handguard piece have helicoils  
inserted therein, said helicoils being adapted for  
threaded engagement with a screw.



17. A modular sleeve as recited in claim 16, further comprising:

a plurality of external dovetail interface elements having an exterior horizontal surface with a cross-sectional dovetail shape adapted to attach ancillary equipment, and an opposite, generally flat, interior surface, said interior surface having a plurality of projecting elements, each projecting element having a T-shaped cross-section adapted to engage the cutout portions of said upper handguard interface channels and bottom handguard upper channels.

18. A modular sleeve as recited in claim 16, further comprising:

a plurality of apertures in said external dovetail interface elements, said apertures adapted to receive a screw.